

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims (deleted text being struck through and added text being underlined):

1 1. (Currently Amended) A stabilized ladder system ~~for~~ comprising:
2 a ladder assembly comprising a pair of rails and a plurality of rungs
3 extending between the rails, each of the rails having an upper end and a
4 lower end, each of the rails having a lower cavity extending into the lower
5 end of the rail, each of the rungs having opposite ends and at least one of
6 the rungs having an end cavity extending into each of the opposite ends of
7 the rung through the rails;
8 a ladder leveling assembly comprising a lower extension arm mounted
9 on each of the rails of the ladder assembly, each of the lower extension arms
10 being extendable from the lower end of one of the rails, each of the lower
11 extension arms having an upper end slidably inserted into the lower cavity
12 of the rail, each of the lower extension arms mounted thereon being
13 extendable from the rail for engaging the ground surface; and
14 a lower stabilizer assembly for stabilizing a lower portion of the
15 ladder assembly with respect to a ground surface, the lower stabilizer
16 assembly comprising a pair of outboard foot assemblies with a position of
17 each of the outboard foot assemblies being laterally adjustable with respect
18 to the rails of the ladder assembly such that a lateral spacing of the pair of
19 outboard foot assemblies is adjustable;
20 wherein each of the outboard foot assemblies comprises:
21 a lower outboard rail extending substantially parallel to the rails
22 of the ladder assembly, the lower outboard rail having a lower end, a
23 lower end cavity extending into the lower end of the lower outboard
24 rail;
25 an upper lateral brace arm having an inner end extending into
26 one of the ends of the rungs of the ladder assembly, an outer end of

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

27 the upper lateral brace arm being mounted on the upper outboard rail,
28 the inner end of the upper lateral brace arm being slidably received in
29 the rung for adjusting a lateral spacing between the upper outboard
30 rail and one of the rails of the ladder assembly, the upper lateral brace
31 arm having a plurality of apertures formed therein for receiving a pin
32 when the upper lateral brace arm is at more than one lateral spacing
33 from one of the rails of the ladder assembly;

34 a lower lateral brace arm having an inner end extending into one
35 of the ends of the rungs of the ladder assembly, an outer end of the
36 lower lateral brace arm being mounted on the lower outboard rail, the
37 inner end of the lower lateral brace arm being slidably received in the
38 rung for adjusting a lateral spacing between the lower outboard rail
39 and one of the rails of the ladder assembly, the lower lateral brace arm
40 having a plurality of apertures formed therein for receiving a pin when
41 the lower lateral brace arm is at more than one lateral spacing from
42 one of the rails of the ladder assembly;

43 securing means for releasably securing the position of at least
44 one of the lateral brace arms with respect to a respective one of the
45 rungs of the ladder assembly; and

46 an outboard extension leg having an upper end slidably inserted
47 into the lower end cavity of the lower outboard rail, the outboard
48 extension leg being extendable from the lower outboard rail for
49 engaging the ground surface.

2. (Cancelled)

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 3. (Previously presented) A stabilized ladder system comprising:

2 a ladder assembly comprising a pair of rails and a plurality of rungs
3 extending between the rails, each of the rails having an upper end and a
4 lower end, each of the rails having a lower cavity extending into the lower
5 end of the rail, each of the rungs having opposite ends and at least one of
6 the rungs having an end cavity extending into each of the opposite ends of
7 the rung through the rails;

8 a ladder leveling assembly comprising a lower extension arm mounted
9 on each of the rails of the ladder assembly, each of the lower extension arms
10 being extendable from the lower end of one of the rails, each of the lower
11 extension arms having an upper end slidably inserted into the lower cavity
12 of the rail, each of the lower extension arms mounted thereon being
13 extendable from the rail for engaging the ground surface; and

14 a lower stabilizer assembly for stabilizing a lower portion of the
15 ladder assembly with respect to a ground surface, the lower stabilizer
16 assembly comprising a pair of outboard foot assemblies with a position of
17 each of the outboard foot assemblies being laterally adjustable with respect
18 to the rails of the ladder assembly such that a lateral spacing of the pair of
19 outboard foot assemblies is adjustable;

20 a ladder extending assembly comprising an upper extension arm
21 mounted on each of the rails of the ladder assembly, each of the upper
22 extension arms being extendable from the upper end of one of the rails, each
23 of the upper extension arms having a lower end slidably inserted into the
24 end cavity of the rail, each of the upper extension arms being extendable
25 from the rail for engaging a structure.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 4. (Currently Amended) The system of claim [[[1]]] 20 wherein each
2 of the rails has an upper cavity extending into the upper end of the rail, and
3 additionally comprising an upper stabilizer assembly for stabilizing an
4 upper portion of the ladder assembly with respect to a structure, the upper
5 stabilizer assembly comprising a pair of outboard support assemblies with a
6 position of each of the outboard support assemblies being laterally
7 adjustable with respect to the rails of the ladder assembly such that a lateral
8 spacing of the pair of outboard support assemblies is adjustable.

1 5. (Previously presented) The system of claim 4 wherein each of the
2 outboard support assemblies comprises:

3 an upper outboard rail extending substantially parallel to the rails of
4 the ladder assembly, the upper outboard rail having an upper end, an upper
5 end cavity extending into the upper end of the upper outboard rail;

6 a lateral brace arm having an inner end extending into one of the ends
7 of the rungs of the ladder assembly, an outer end of the lateral brace arm
8 being mounted on the outboard rail, the inner end of the lateral brace arm
9 being slidably received in the rung for adjusting a lateral spacing between
10 the upper outboard rail and one of the rails of the ladder assembly;

11 securing means for releasably securing the position of the lateral
12 brace arms with respect to a respective one of the rungs of the ladder
13 assembly;

14 an outboard extension arm having a lower end slidably inserted into
15 the upper end cavity of the upper outboard rail, an upper end of the
16 outboard extension arm having a contact member mounted thereon, the
17 outboard extension arm and the contact member being extendable from the
18 upper outboard rail for engaging the structure.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 6. (Previously presented) A stabilized ladder system comprising:

2 a ladder assembly comprising a pair of rails and a plurality of rungs
3 extending between the rails, each of the rails having an upper end and a
4 lower end, each of the rails having a lower cavity extending into the lower
5 end of the rail, each of the rungs having opposite ends and at least one of
6 the rungs having an end cavity extending into each of the opposite ends of
7 the rung through the rails;

8 a ladder leveling assembly comprising a lower extension arm mounted
9 on each of the rails of the ladder assembly, each of the lower extension arms
10 being extendable from the lower end of one of the rails, each of the lower
11 extension arms having an upper end slidably inserted into the lower cavity
12 of the rail, each of the lower extension arms mounted thereon being
13 extendable from the rail for engaging the ground surface; and

14 a lower stabilizer assembly for stabilizing a lower portion of the
15 ladder assembly with respect to a ground surface, the lower stabilizer
16 assembly comprising a pair of outboard foot assemblies with a position of
17 each of the outboard foot assemblies being laterally adjustable with respect
18 to the rails of the ladder assembly such that a lateral spacing of the pair of
19 outboard foot assemblies is adjustable;

20 a medial stabilizer assembly for stabilizing a middle portion of the
21 ladder assembly with respect to a ground surface, the medial stabilizer
22 assembly comprising a pair of outboard steadying assemblies with a position
23 of each of the outboard steadying assemblies being laterally adjustable with
24 respect to the rails of the ladder assembly such that a lateral spacing of the
25 pair of outboard steadying assemblies is adjustable.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 7. (Previously presented) The system of claim 6 wherein each of the
2 outboard steadying assemblies comprises:

3 a medial outboard rail extendable substantially parallel to the rails of
4 the ladder assembly, the medial outboard rail having a lower end, a lower
5 end cavity extending into the lower end of the medial outboard rail;

6 a medial brace arm having an inner end extending into one of the ends
7 of the rungs of the ladder assembly, an outer end of the medial brace arm
8 being mounted on the outboard rail, the inner end of the medial brace arm
9 being slidably received in the rung for adjusting a lateral spacing between
10 the medial outboard rail and one of the rails of the ladder assembly;

11 securing means for releasably securing the position of the medial
12 brace arm with respect to a respective one of the rungs of the ladder
13 assembly;

14 an outboard steadying arm having an upper end slidably inserted into
15 the lower end cavity of the medial outboard rail, the outboard steadying arm
16 being extendable from the medial outboard rail for engaging the ground
17 surface.

1 8. (Currently Amended) The system of claim [[[1]]] 20 wherein the
2 ladder assembly comprises a scaffold structure with a pair of scaffold
3 supports, each of the scaffold supports having the pair of rails and the
4 plurality of rungs, the scaffold structure also including a platform for
5 extending between the scaffold supports.

1 9. (Currently Amended) The system of claim [[[1]]] 20 wherein the
2 ladder assembly comprises a plurality of ladder sections each having the
3 pair of rails and the plurality of rungs, each of the plurality of ladder
4 sections being pivotally mounted to at least one other ladder section.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 10. (Original) The system of claim 9 wherein the plurality of ladder
2 sections includes at least five ladder sections pivotally connected together
3 to form a chain of ladder sections, the plurality of ladder sections having a
4 first position in which the ladders sections form a step ladder configuration
5 and a second position in which the ladder sections form a bridging ladder
6 configuration.

1 11. (Currently Amended) The system of claim 1 ~~wherein each of the~~
2 ~~outboard foot assemblies comprises:~~

3 ~~a lower outboard rail extending substantially parallel to the rails~~
4 ~~of the ladder assembly, the lower outboard rail having a lower end, a~~
5 ~~lower end cavity extending into the lower end of the lower outboard~~
6 ~~rail;~~

7 ~~an upper lateral brace arm having an inner end extending into~~
8 ~~one of the ends of the rungs of the ladder assembly, an outer end of~~
9 ~~the upper lateral brace arm being mounted on the upper outboard rail,~~
10 ~~the inner end of the upper lateral brace arm being slidably received in~~
11 ~~the rung for adjusting a lateral spacing between the upper outboard~~
12 ~~rail and one of the rails of the ladder assembly;~~

13 ~~a lower lateral brace arm having an inner end extending into one~~
14 ~~of the ends of the rungs of the ladder assembly, an outer end of the~~
15 ~~lower lateral brace arm being mounted on the lower outboard rail, the~~
16 ~~inner end of the lower lateral brace arm being slidably received in the~~
17 ~~rung for adjusting a lateral spacing between the lower outboard rail~~
18 ~~and one of the rails of the ladder assembly;~~

19 ~~securing means for releasably securing the position of at least~~
20 ~~one of the lateral brace arms with respect to a respective one of the~~
21 ~~rungs of the ladder assembly; and~~

22 ~~an outboard extension leg having an upper end slidably inserted~~
23 ~~into the lower end cavity of the lower outboard rail, the outboard~~

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

24 ~~extension leg being extendable from the lower outboard rail for~~
25 ~~engaging the ground surface.~~

26 further comprising a ladder extending assembly comprising an upper
27 extension arm mounted on each of the rails of the ladder assembly, each of
28 the upper extension arms being extendable from the upper end of one of the
29 rails, each of the upper extension arms having a lower end slidably inserted
30 into the end cavity of the rail, each of the upper extension arms being
31 extendable from the rail for engaging a structure;

32 wherein each of the rails has an upper cavity extending into the upper
33 end of the rail, and additionally comprising an upper stabilizer assembly for
34 stabilizing an upper portion of the ladder assembly with respect to a
35 structure, the upper stabilizer assembly comprising a pair of outboard
36 support assemblies with a position of each of the outboard support
37 assemblies being laterally adjustable with respect to the rails of the ladder
38 assembly such that a lateral spacing of the pair of outboard support
39 assemblies is adjustable, wherein each of the outboard support assemblies
40 comprises:

41 an upper outboard rail extending substantially parallel to the
42 rails of the ladder assembly, the upper outboard rail having an upper
43 end, an upper end cavity extending into the upper end of the upper
44 outboard rail;

45 a lateral brace arm having an inner end extending into one of the
46 ends of the rungs of the ladder assembly, an outer end of the lateral
47 brace arm being mounted on the outboard rail, the inner end of the
48 lateral brace arm being slidably received in the rung for adjusting a
49 lateral spacing between the upper outboard rail and one of the rails of
50 the ladder assembly;

51 securing means for releasably securing the position of the lateral
52 brace arm with respect to a respective one of the rungs of the ladder
53 assembly;

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

54 an outboard extension arm having a lower end slidably inserted
55 into the upper end cavity of the upper outboard rail, an upper end of
56 the outboard extension arm having a contact member mounted thereon,
57 the outboard extension arm and the contact member being extendable
58 from the upper outboard rail for engaging the structure; and
59 a medial stabilizer assembly for stabilizing a middle portion of the
60 ladder assembly with respect to a ground surface, the medial stabilizer
61 assembly comprising a pair of outboard steadying assemblies with a position
62 of each of the outboard steadying assemblies being laterally adjustable with
63 respect to the rails of the ladder assembly such that a lateral spacing of the
64 pair of outboard steadying assemblies is adjustable, wherein each of the
65 outboard steadying assemblies comprises:

66 a medial outboard rail extendable substantially parallel to the
67 rails of the ladder assembly, the medial outboard rail having a lower
68 end, a lower end cavity extending into the lower end of the medial
69 outboard rail;

70 a medial brace arm having an inner end extending into one of the
71 ends of the rungs of the ladder assembly, an outer end of the medial
72 brace arm being mounted on the outboard rail, the inner end of the
73 medial brace arm being slidably received in the rung for adjusting a
74 lateral spacing between the medial outboard rail and one of the rails
75 of the ladder assembly;

76 securing means for releasably securing the position of the medial
77 brace arm with respect to a respective one of the rungs of the ladder
78 assembly;

79 an outboard steadying arm having an upper end slidably inserted into
80 the lower end cavity of the medial outboard rail, the outboard steadying arm
81 being extendable from the medial outboard rail for engaging the ground
82 surface.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 12. (Previously presented) The system of claim 3 wherein each of the
2 outboard foot assemblies comprises:

3 a lower outboard rail extending substantially parallel to the rails of
4 the ladder assembly, the lower outboard rail having a lower end, a lower end
5 cavity extending into the lower end of the lower outboard rail;

6 an upper lateral brace arm having an inner end extending into one of
7 the ends of the rungs of the ladder assembly, an outer end of the upper
8 lateral brace arm being mounted on the upper outboard rail, the inner end of
9 the upper lateral brace arm being slidably received in the rung for adjusting
10 a lateral spacing between the upper outboard rail and one of the rails of the
11 ladder assembly;

12 a lower lateral brace arm having an inner end extending into one of
13 the ends of the rungs of the ladder assembly, an outer end of the lower
14 lateral brace arm being mounted on the lower outboard rail, the inner end of
15 the lower lateral brace arm being slidably received in the rung for adjusting
16 a lateral spacing between the lower outboard rail and one of the rails of the
17 ladder assembly;

18 securing means for releasably securing the position of at least one of
19 the lateral brace arms with respect to a respective one of the rungs of the
20 ladder assembly; and

21 an outboard extension leg having an upper end slidably inserted into
22 the lower end cavity of the lower outboard rail, the outboard extension leg
23 being extendable from the lower outboard rail for engaging the ground
24 surface.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 13. (Previously presented) The system of claim 3 wherein each of the
2 rails has an upper cavity extending into the upper end of the rail, and
3 additionally comprising an upper stabilizer assembly for stabilizing an
4 upper portion of the ladder assembly with respect to a structure, the upper
5 stabilizer assembly comprising a pair of outboard support assemblies with a
6 position of each of the outboard support assemblies being laterally
7 adjustable with respect to the rails of the ladder assembly such that a lateral
8 spacing of the pair of outboard support assemblies is adjustable.

1 14. (Previously presented) The system of claim 3 wherein the ladder
2 assembly comprises a scaffold structure with a pair of scaffold supports,
3 each of the scaffold supports having the pair of rails and the plurality of
4 rungs, the scaffold structure also including a platform for extending
5 between the scaffold supports.

1 15. (Previously presented) The system of claim 3 wherein the ladder
2 assembly comprises a plurality of ladder sections each having the pair of
3 rails and the plurality of rungs, each of the plurality of ladder sections
4 being pivotally mounted to at least one other ladder section.

1 16. (Previously presented) The system of claim 6 wherein each of the
2 outboard foot assemblies comprises:

3 a lower outboard rail extending substantially parallel to the rails of
4 the ladder assembly, the lower outboard rail having a lower end, a lower end
5 cavity extending into the lower end of the lower outboard rail;

6 an upper lateral brace arm having an inner end extending into one of
7 the ends of the rungs of the ladder assembly, an outer end of the upper
8 lateral brace arm being mounted on the upper outboard rail, the inner end of
9 the upper lateral brace arm being slidably received in the rung for adjusting
10 a lateral spacing between the upper outboard rail and one of the rails of the
11 ladder assembly;

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

12 a lower lateral brace arm having an inner end extending into one of
13 the ends of the rungs of the ladder assembly, an outer end of the lower
14 lateral brace arm being mounted on the lower outboard rail, the inner end of
15 the lower lateral brace arm being slidably received in the rung for adjusting
16 a lateral spacing between the lower outboard rail and one of the rails of the
17 ladder assembly;

18 securing means for releasably securing the position of at least one of
19 the lateral brace arms with respect to a respective one of the rungs of the
20 ladder assembly; and

21 an outboard extension leg having an upper end slidably inserted into
22 the lower end cavity of the lower outboard rail, the outboard extension leg
23 being extendable from the lower outboard rail for engaging the ground
24 surface.

1 17. (Previously presented) The system of claim 6 wherein each of the
2 rails has an upper cavity extending into the upper end of the rail, and
3 additionally comprising an upper stabilizer assembly for stabilizing an
4 upper portion of the ladder assembly with respect to a structure, the upper
5 stabilizer assembly comprising a pair of outboard support assemblies with a
6 position of each of the outboard support assemblies being laterally
7 adjustable with respect to the rails of the ladder assembly such that a lateral
8 spacing of the pair of outboard support assemblies is adjustable.

1 18. (Previously presented) The system of claim 6 wherein the ladder
2 assembly comprises a scaffold structure with a pair of scaffold supports,
3 each of the scaffold supports having the pair of rails and the plurality of
4 rungs, the scaffold structure also including a platform for extending
5 between the scaffold supports.

Appln. No. 10/693,725

Amendment dated June 22, 2005

Reply to Office Action mailed April 15, 2005

1 19. (Previously presented) The system of claim 6 wherein the ladder
2 assembly comprises a plurality of ladder sections each having the pair of
3 rails and the plurality of rungs, each of the plurality of ladder sections
4 being pivotally mounted to at least one other ladder section.

1 20. (Previously presented) A stabilized ladder system comprising:
2 a ladder assembly comprising a pair of rails and a plurality of rungs
3 extending between the rails, each of the rails having an upper end and a
4 lower end, each of the rails having a lower cavity extending into the lower
5 end of the rail, each of the rungs having opposite ends and at least one of
6 the rungs having an end cavity extending into each of the opposite ends of
7 the rung through the rails;

8 a ladder extending assembly comprising an upper extension arm
9 mounted on each of the rails of the ladder assembly, each of the upper
10 extension arms being extendable from the upper end of one of the rails, each
11 of the upper extension arms having a lower end slidably inserted into the
12 end cavity of the rail, each of the upper extension arms being extendable
13 from the rail for engaging a structure; and

14 a lower stabilizer assembly for stabilizing a lower portion of the
15 ladder assembly with respect to a ground surface, the lower stabilizer
16 assembly comprising a pair of outboard foot assemblies with a position of
17 each of the outboard foot assemblies being laterally adjustable with respect
18 to the rails of the ladder assembly such that a lateral spacing of the pair of
19 outboard foot assemblies is adjustable.